

I. Regulation and Courses

The minimum graduation regulation [704 KAR 3:305](#) (3)(b) states, “A mathematics course or its equivalent as determined by the district shall be taken each year of high school to ensure readiness for postsecondary education or the workforce”; therefore the KDE does not maintain a list of “approved” courses for the 4th year of mathematics, as these courses can be determined by the district. However, it is important to note that Section (2)(8) of this same regulation requires “Academic and career interest standards-based learning experiences - seven (7) credits including four (4) standards-based learning experiences in an academic or career interest based on the student’s individual learning plan;”

Also, the regulation states in (3)(d), “If a student does not meet the college readiness benchmarks for mathematics as established by the Council on Postsecondary Education in 13 KAR 2:020, the student shall take a mathematics transitional course or intervention, which is monitored to address remediation needs, before exiting high school.” So, a fourth mathematics course could be a transitional or college/career ready math course.

Other courses that could follow Algebra II and are commonly considered as 4th mathematics courses are:

1. Algebra III (Preparation for college algebra),
2. Transitional/intervention/CCR Math,
3. College Algebra - dual credit,
4. Pre-calculus,
5. Trigonometry,
6. Calculus (AP (AB and BC) or not AP),
7. AP Computer Science (A or P)*
8. Math Concepts, Discreet Math, Finite Math, Advanced Topics in Math,
9. Probability & Statistics (AP or not AP),
10. Dual credit mathematics or related courses,
11. Integrated Math IV,
12. Math for Business and Industry,
13. ESL/Special Topics in Math (160132) for English Language Learners only – extensive support
14. Agriculture Math (interdisciplinary math/CTE),
15. Financial Literacy for math credit (interdisciplinary math/CTE),
16. Medical Math for math credit (interdisciplinary math/CTE),
17. Money Skills for math credit (interdisciplinary math/CTE) and
18. **Advanced** Accounting (interdisciplinary math/CTE - 070125).

* Since an AP course framework is provided for this course and that framework is used to develop curriculum in preparation for AP testing, AP Computer Science is considered a mathematics course by College Board (CB) and KDE. Other computer programming/science course curriculums should be reviewed before including them as a 4th mathematics course possibility. See guidance on page 2 of this document.

This is not an exhaustive list of course possibilities. Additions to the list from 2015 to 2017 are highlighted. Please visit

http://education.ky.gov/curriculum/modcurrframe/Documents/State_course_list_ALL_w-certifications.pdf for uniform course codes for codes and descriptions.

II. Guidance and Contact Information

The KDE provides guidance to districts for determining whether or not other courses should count as a 4th mathematics course that are not specific to mathematics or are not listed in the uniform course code under mathematics.

1. Review of curriculum and resources for each course under consideration: it is best practice to have a high school mathematics certified teacher group review each course curriculum to determine the level of high school mathematics required in the course, including the standards for mathematical practice, and make a recommendation to the district. Consideration should also be given to mathematics courses that enable students to be ready for postsecondary education or the workforce. *Minimum graduation requirements regulation 704 KAR 3:305 states “A mathematics course or its equivalent as determined by the district shall be taken each year of high school to ensure readiness for postsecondary education or the workforce.”*
2. Each school should make sure to document which courses have been reviewed and can be considered as a 4th mathematics course. This information can be used by the guidance office to appropriately schedule students.
3. The district must ensure that an appropriately certified teacher is assigned to teach each course for LEAD reporting. This should occur before offering and scheduling students. The authorization of ESSA has caused changes. Check with district personnel who handle the LEAD report. If further questions arise, visit www.kyepsb.net or call EPSB at (888) 598-7667 for the latest teacher permissions and requirements.
4. Document course(s) taken to meet minimum mathematics requirements. This documentation should be maintained to demonstrate each student taking the reviewed course(s) has met minimum graduation requirements for mathematics.

For additional information please contact:

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